

REMARKS

The Applicants appreciate the Examiner's careful examination of this case. Reconsideration and re-examination are respectfully requested in view of the instant remarks.

With regard to paragraph 1 of the Office Action, the correction requested by the Examiner to claim 3 has been made.

With regard to paragraphs 2 and 3 of the Office Action, the Examiner has rejected claims 1 – 3 and 7 – 14 as being obvious over Nissan Motor in view of Petersen or Sumitomo Rubber Ind. Ltd. In view of this rejection, claim 1 has been restricted to specify that the generator means radiates electromagnetic energy, and that the generator means generates the electromagnetic energy at such a frequency that the tyre becomes heated as a result of the tyre being made of rubber material having dielectric properties which enable the rubber material to interact with the radiated electromagnetic energy of the said frequency and become heated. This method of heating the tyre is completely different from the method employed in Nissan Motor. In Nissan Motor high frequency electromagnetic energy is employed to induce eddy currents in the metal conductors 14, thereby generating heat by conduction. The frequency used in Nissan Motor does not heat the tyre due to interaction of the rubber material of the tyre and the radiated electromagnetic energy. Nissan Motor uses high frequency magnetic induction as opposed to radiation, and thereafter relies on conduction as the tyre heating mechanism. The considerable advantage of the new claim 1 filed herewith is that the tyre does not have to

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have the Nissan Motor conductors 14. By being not having to have the Nissan Motor conductors 14, manufacturing costs can be saved, in addition to the cost of the conductors themselves. Furthermore, the conductors 14 can render the tyre too heavy and/or too rigid, which is unacceptable for racing vehicle tyres.

Petersen discloses a tyre heating device having a heating element 3. This heating element 3 in no way equates to the generator means now specified in claim 1 which generates the electromagnetic energy at such a frequency that the tyre becomes heated as a result of the tyre being made of rubber material having dielectric properties which enable the rubber material to interact with the radiated electromagnetic energy of the said frequency and become heated. Thus if Petersen is combined with Nissan Motor, the applicants' present claim 1 is still not achieved.

Sumitomo discloses a post-vulcanizing process applied to a tyre vulcanized by a press vulcanizing machine just after a pre-vulcanization process. The tyre is in a post-cure box. The tyre is not an inflated tyre, the tyre is not a racing vehicle tyre, and the tyre is not on a racing vehicle wheel. All of these features are specified in the Applicants' new claim 1. The Sumitomo invention seems to be concerned with maintaining the temperature in the post-cure box to 60 - 140° C. Sumitomo states that the Sumitomo invention is suitable for vulcanizing a raw tyre while reducing pre-vulcanization duration using a press vulcanization machine. Sumitomo does not disclose or suggest that the Sumitomo post-vulcanizing process could be used with a tyre of the

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type disclosed in Nissan Motor. Even if Sumitomo is combined with Nissan Motor, then the tyre would still have the conductors 14 (which the Applicants do not) and there would be no disclosure of using the Applicant's generator means which generates the electromagnetic energy at such a frequency that the tyre becomes heated as result of the tyre being made of rubber material having dielectric properties which enable the rubber material to interact with the radiated electromagnetic energy of the said frequency and become heated.

Thus the combination of Nissan Motor with Petersen does not provide the Applicant's present claim 1. The combination of Nissan Motor with Sumitomo does not provide the Applicant's present claim 1. Indeed, the combination of Nissan Motor, Petersen and Sumitomo also does not provide the Applicant's present claim 1.

The Applicant relies for patentability of claims 2, 3 and 7 - 14 on the fact that these claims contain all of the features of the presently proposed claim 1, which claim 1 is believed to be allowable for the above stated reason.

With regard to paragraph 4 of the Office Action, the Examiner has rejected claims 4 - 6 as obvious over Nissan Motor, in view of Petersen or Sumitomo, and further in view of Searle et al. The Applicant relies for the patentability of claims 4 - 6 on the fact that these claims contain all of the features of the presently proposed claim 1, which claim 1 is believed to be allowable for the above stated reasons.

The Examiner's position as stated in paragraph 5 of the Office Action has been noted. The presently proposed restricted claim 1 is believed to meet the

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new grounds of rejection, and in particular clearly to distinguish over Nissan Motor, Petersen and Sumitomo.

The description at page 2 lines 3 - 11 has been amended to make it consistent with the amended claim 1.

Accordingly, it is respectfully submitted that this application is in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this RESPONSE is found to be INCOMPLETE, or if at any time it appears that a TELEPHONE CONFERENCE with Counsel would help advance prosecution, please telephone the undersigned or one of his associates, collect in Waltham, Massachusetts, at (781) 890-5678.

Respectfully submitted,



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